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08/447,712	05/23/95	HARVEY	J 5634.127

EXAMINER

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ART UNIT	PAPER NUMBER
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2737

DATE MAILED: 01/26/98

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

- ☒ Responsive to communication(s) filed on 9-16-97
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 3-34 is/are pending in the application.
Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 3-34 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) _____
- ☒ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--SEE OFFICE ACTION ON THE FOLLOWING PAGES--

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DETAILED ACTION

1. In response to the telephone interview dated April 17, 1997, the final Office action mailed 3/19/97 has been vacated. The new Office action is as follows.

2. As directed by the amendment filed 9/16/97, claims 3, 6, 7, 12, 13, 15, 21, 22, 25, 30, were amended. Thus, claims 3-34 are presently pending in this application.

3. After reviewing the restriction requirement in US Patent 5,233,654 it is believed that the claims of the instant application are subject to a double patenting analysis against US Patent 5,233,654 and US Patent 5,335,277.

4. In view of further analysis and applicant's arguments, the rejection of the claims in the instant application under double patenting based on the broad analysis of *In re Schneller* as set forth in paragraphs 7-10 of the previous Office Action has been withdrawn.

DOUBLE PATENTING BETWEEN APPLICATIONS

5. Conflicts exist between claims of the following related co-pending applications which includes the present application:

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#	Ser. No.	#	Ser. No.	#	Ser. No.
1	397371	2	397582	3	397636
4	435757	5	435758	6	437044
7	437045	8	437629	9	437635
10	437791	11	437819	12	437864
13	437887	14	437937	15	438011
16	438206	17	438216	18	438659
19	439668	20	439670	21	440657
22	440837	23	441027	24	441033
25	441575	26	441577	27	441701
28	441749	29	441821	30	441880
31	441942	32	441996	33	442165
34	442327	35	442335	36	442369
37	442383	38	442505	39	442507
40	444643	41	444756	42	444757
43	444758	44	444781	45	444786
46	444787	47	444788	48	444887
49	445045	50	445054	51	445290
52	445294	53	445296	54	445328
55	446123	56	446124	57	446429

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58	446430	59	446431	60	446432
61	446494	62	446553	63	446579
64	447380	65	447414	66	447415
67	447416	68	447446	69	447447
70	447448	71	447449	72	447496
73	447502	74	447529	75	447611
76	447621	77	447679	78	447711
79	447712	80	447724	81	447726
82	447826	83	447908	84	447938
85	447974	86	447977	87	448099
88	448116	89	448141	90	448143
91	448175	92	448251	93	448309
94	448326	95	448643	96	448644
97	448662	98	448667	99	448794
100	448810	101	448833	102	448915
103	448916	104	448917	105	448976
106	448977	107	448978	108	448979
109	449097	110	449110	111	449248
112	449263	113	449281	114	449291
115	449302	116	449351	117	449369

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118	449411	119	449413	120	449523
121	449530	122	449531	123	449532
124	449652	125	449697	126	449702
127	449717	128	449718	129	449798
130	449800	131	449829	132	449867
133	449901	134	450680	135	451203
136	451377	137	451496	138	451746
139	452395	140	458566	141	458699
142	458760	143	459216	144	459217
145	459218	146	459506	147	459507
148	459521	149	459522	150	459788
151	460043	152	460081	153	460085
154	460120	155	460187	156	460240
157	460256	158	460274	159	460387
160	460394	161	460401	162	460556
163	460557	164	460591	165	460592
166	460634	167	460642	168	460668
169	460677	170	460711	171	460713
172	460743	173	460765	174	460766
175	460770	176	460793	177	460817

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178	466887	179	466888	180	466890
181	466894	182	467045	183	467904
184	468044	185	468323	186	468324
187	468641	188	468736	189	468994
190	469056	191	469059	192	469078
193	469103	194	469106	195	469107
196	469108	197	469109	198	469355
199	469496	200	469517	201	469612
202	469623	203	469624	204	469626
205	470051	206	470052	207	470053
208	470054	209	470236	210	470447
211	470448	212	470476	213	470570
214	470571	215	471024	216	471191
217	471238	218	471239	219	471240
220	472066	221	472399	222	472462
223	472980	224	473213	225	473224
226	473484	227	473927	228	473996
229	473997	230	473998	231	473999
232	474119	233	474139	234	474145
235	474146	236	474147	237	474496
238	474674	239	474963	240	474964
241	475341	242	475342	243	477547

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244	477564	245	477570	246	477660
247	477711	248	477712	249	477805
250	477955	251	478044	252	478107
253	478544	254	478633	255	478767
256	478794	257	478858	258	478864
259	478908	260	479042	261	479215
262	479216	263	479217	264	479374
265	479375	266	479414	267	479523
268	479524	269	479667	270	480059
271	480060	272	480383	273	480392
274	480740	275	481074	276	482573
277	482574	278	482857	279	483054
280	483169	281	483174	282	483269
283	483980	284	484275	285	484276
286	484858	287	484865	288	485282
289	485283	290	485507	291	485775
292	486258	293	486259	294	486265
295	486266	296	486297	297	487155
298	487397	299	487408	300	487410
301	487411	302	487428	303	487506
304	487516	305	487526	306	487536
307	487546	308	487556	309	487565

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310	487649	311	487851	312	487895
313	487980	314	487981	315	487982
316	487984	317	488032	318	488058
319	488378	320	488383	321	488436
322	488438	323	488439	324	488619
325	488620	326	498002	327	511491
328	485773	329	113329		

6. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. The attached Appendix provides clear evidence that such conflicting claims exist between the 329 related co-pending applications identified above. However, an analysis of all claims in the 329 related co-pending applications would be an extreme burden on the Office requiring millions of claim comparisons.

In order to resolve the conflict between applications, applicant is required to either:

- (1) file terminal disclaimers in each of the related 329 applications terminally disclaiming each of the other 328 applications, or;
- (2) provide an affidavit attesting to the fact that all claims in the 329 applications have been reviewed by applicant and that no conflicting claims exists between the applications. Applicant should provide all relevant factual information including the specific steps taken to insure that no conflicting claims exist between the applications, or;

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(3) resolve all conflicts between claims in the above identified 329 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 329 applications (note: the five examples in the attached Appendix are merely illustrative of the overall problem. Only correcting the five identified conflicts would not satisfy the requirement).

Failure to comply with the above requirement will result in abandonment of the application.

INFORMATION DISCLOSURE STATEMENTS

7. Receipt is acknowledged of applicant's Information Disclosure Statements filed 12/11/95, 12/22/95, 2/6/96, 4/17/96 and 4/7/97. In view of the unusually large number of references cited in the instant application (approximately 2,200 originally and 645 in the subsequent IDS) and the failure of applicant to point out why such a large number of references is warranted, these references have been considered in accordance with 37 C.F.R. 1.97 and 1.98 to the best ability by the examiner with the time and resources available.

The foreign language references cited therein where there is no statement of relevance or no translation are not in compliance with 37 C.F.R. 1.98 and have not been considered. Numerous references listed in the IDS are subsequent to applicant's latest effective filing date of 9/11/87, therefore, the relevancy of these references is unclear. Also cited are numerous references that are apparently unrelated to the subject matter of the instant invention such as: US Patent # 33,189 directed toward a beehive, GB 1565319 directed toward a chemical compound, a cover sheet with only the word "ZING", a computer printout from a library search with the words

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“LST” on it and a page of business cards including that of co-inventor James Cuddihy, among others. The relevancy of these references cannot be ascertained. Furthermore, there are several database search results listed in foreign languages (such as German) which list only the title and document information; no copy has been provided, therefore, these references have not been considered.

CLAIM REJECTIONS - 35 USC § 112

8. Claims 3-34 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

37 C.F.R. 1.75(d)(1) requires that:

“the terms and the phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description”.

The following limitations were not supported by the specification as originally filed:

In claim 3, “controlling said computer based on said one or more control signals”, “generating *a receiver specific value* by processing information that is stored in said computer”, “generating *a receiver specific signal based on said receiver specific computer generated value*”, “*communicating a unit of programming* to said output device *based on said generated receiver specific signal*”, and “delivering said receiver specific program at said one or more output devices, said receiver specific program including a simultaneous or sequential presentation of

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two or more of units of programming, said two or more units of programming including said *communicated unit of programming* and at least one of said received and *selected one or more units of programming*".

In claim 4, "communicating said *generated receiver specific signal* to a *selective transmission device*", and "controlling said selective transmission device to select said received one or more units of programming".

In claim 5, "said *generated receiver specific signal* is a *programming signal*", and "placing one or more data for output at a memory location that outputs to said output device".

In claim 6, "receiving a *first control signal* at one or more origination transmitters", "receiving a *second control signal* at said one or more origination transmitters, said *second control signal* operative to communicate said *first control signal* to an intermediate transmitter", and "said first control signal effective at said at least one of a plurality of receiver stations to control said computer to compute a receiver specific value by processing information stored in said computer, compute a receiver specific signal based on said receiver specific value, and communicate a unit of programming to said output device based on said receiver specific signal".

In claim 7, "receiving and storing a control signal at a transmitter station", and "said *control signal* effective at said at least one of a plurality of receiver stations to control said computer to compute a receiver specific value by processing information stored in said computer, compute a receiver specific signal based on said receiver specific value, and communicate a unit of programming to said output device based on said receiver specific signal"

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In claim 8, “one or more unit programming comprise some of a *software module*, and said one or more control signals operate to generate at least some of *the balance of said software module*”, and “*incorporating said generated receiver specific value into code*”.

In claim 9, “programming includes *the balance of said at least one complete image*”, “*synchronizing the delivery at or communication from said output device of said delivered tow or more units of programming based on information contained in said one or more control signals*”, and “producing said *balance of said at least one complete image* at a specific image location”.

In claim 10, “*assembling at least some portion of said one or more control signals*”, “*compiling code to be communicated in said generated receiver specific signal*”, “*linking a unit of programming to be communicated to one of said computer and said output device*”, and “*processing machine language code containing said generated receiver specific value*”.

In claim 12, “communicating said *receiver specific value* from said memory to one or the group consisting of : (1) a video monitor, (2) a speaker, (3) a printer, (4) a processor, (5) a signal generator, and (5) a transmitter”

In claim 13, “transferring at least some of said received and selected one or more units of programming to said output device *before generating said receiver specific value*”.

In claim 14, “generating said *receiver specific value based on a schedule*”, and “selecting at least a portion of said received broadcast or cablecast information transmission *in response to said generated receiver specific signal*”.

In claim 15, “controlling said portion receiver to be capable of receiving and transferring *expanded or contracted code portion information transmissions*”.

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In claim 16, “*clearing a specific memory location in response to said one or more control signals*”.

In claim 17, “*loading said computer program into the memory of said computer in response to said one or more control signals*”, and “*fetching a software module from a memory peripheral in response to said one or more control signals*”.

In claim 18, “*interrupting said controller to cause said computer to communicate said communicated unit of programming at a specific time*”, “*programming said controller to interrupt a specific one of a plurality of processor and/or controller devices*”, and “*detecting a interrupt signal in the information transmission and controlling said controller to communicate said detected interrupt signal to a processor or controller*”.

In claim 19, “*detecting a control program in the information transmission and causing said controller to control one or more receiver station devices in accordance with said control program*”.

In claim 20, “*storing information confirming a passing of said identified first control signal*”, and “*effecting a comparison between said stored information and an identifier so as to generate a control signal*”.

In claim 21, “*generating some portion of one or a computer program and a data module in response to an instruct signal*”

In claim 22, “*communicating said at least one of said two or more units of programming to said one of said one or more origination transmitters and said intermediate transmitter*”.

In claim 25, “*each of said first control signals received from outside of said intermediate transmitter station*”, “*each of said second control signals received from outside of said*

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intermediate transmitter station and *operable to cause said computer in said intermediate transmitter station to select a specific first control signal and to communicate said selected first control signal to at least one or said transmitter*”, “selected first control signal operable at said receiver station to control a second computer *to generate a receiver specific value by processing information stored in said second computer, generate a receiver specific signal based on said receiver specific value, and communicate a unit of programming to an output device based on said receiver specific signal*”.

In claim 26, “*one or more first control signals is received at said intermediate transmitter station before each of said one or more second control signals is received*”.

In claim 27, “*one or more first control signal is received at said intermediate transmitter station after one or more of said second control signals is received*”.

In claim 30, “*storing said one or more received first control signal in one or more of said storage devices*” and “*first control signal operable at said receiver station to control a second computer to generate a receiver specific value by processing information stored in said second computer, generate a receiver specific signal based on said receiver specific value, and communicate a unit of programming to an output device based on said receiver specific signal*”.

In claim 31, “*receiving one or more second control signals, wherein said selecting step is performed by said computer based on information contained within said one or more second control signal*”.

In claim 32, “*transmitting step is performed based on information contained within said one or more second control signals*”.

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In claims 33 and 34, “*operating instructions effective* to control a processor to respond to one of said first control signal and said second control signal”.

9. Claims 3-34 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claims 6, 7, 21, 22, 33 and 34, although the specification discloses the computation of values of subscriber’s portfolio, the specification does not specifically teach that the computation of a receiver specific signal is based on a computed receiver specific value which is computed by processing information stored in a computer. The specification also fails to teach that the output of a unit of programming to an output device is based on the computed specific signal. Therefore, the specification does not provide an enabling disclosure for claims 6, 7, 21, 22, 33 and 34.

Regarding claims 3-5, 8-20, and 23-32, although the specification discloses the generation of graphic for representing the performance of the subscriber’s stock portfolio, the specification does not specifically teach that the generation of a receiver specific signal is based on a generated value which is computed by processing information stored in a computer. The specification also fails to teach that the output of a unit of programming to an output device is based on the generated specific signal. Therefore, the specification does not provide an enabling disclosure for claims 3-5, 8-20 and 23-32.

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10. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 is vague and indefinite because it is unclear whether the computer is located in the receiver station or the intermediate transmitter. Claim 21 requires that the computer is connected to the intermediate transmitter while claim 6 requires that the computer is located in the receiver station. Therefore, dependent claim 21 is inconsistent with the independent claim 6. Clarification without introduction of new matter is required.

CLAIM REJECTIONS - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

12. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Metz et al. (U.S. Patent No. 3,648,270).

Metz et al. disclosed a display system for displaying graphic representations of stock market information comprising a central station or stock exchanges ("a transmitter station") for

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transmitting stock ID and prices information via transmission medium 42 to at least one receiver station (Figs. 4-6). Since the transmitter station transmits the stock ID and prices, the ID and prices must be received (“receiving step”) and collected by the transmitter station and then transferred to a transmitter for transmission to the receiver station (Figs. 4-6). As shown in Figs. 4-6, the circuitries (“a computer”) perform value computations (e.g., adding and comparing, etc) and output graphic information (line 246) and values and character information to an output device 10’ (“an output device”). As disclosed in col. 12, lines 11-25, the circuitries (“a computer”) compute (e.g., by adding a predetermined quantity to a stored reference value) a receiver specific value (e.g., the added reference value) by processing information stored (e.g., the stored reference value) in the circuitries, compute (e.g., by comparing the added reference value with a representation value) a receiver specific signal (e.g., a signal representing a match between the values) based on said receiver specific value (e.g., the added reference value), communicate a unit of programming (e.g., such as the graphic outputted from line 246 or values and characters from lines 262, 266, and 258, see Figs. 1-3) to said output device based on said receiver specific signal (e.g, a signal representing a match between the values). The discussion in col. 4 indicates that the price information is passed to a memory for subsequent computations (the calculations performed by Figs. 4-6 as discussed above) only when the received stock ID is matched with the stored stock ID. Therefore, the stock ID can be considered as “effective to control the computer (Figs. 4-6) to perform computations” (e.g., the calculations performed by Figs. 4-6 as discussed above), and can be considered as “control signal”.

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CLAIM REJECTIONS - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 6, 7 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epstein (U.S. Patent No. 3,387,268) in view of Linstroth et al (U.S. Patent No. 4,942,616) or Toy (U.S. Patent No. 4,554,418).

Epstein disclosed a quotation monitoring system comprising a transmitter station (14, 16) for receiving ("receiving step") and storing stock symbol and prices information from the data source (10) and for transmitting the stock symbol and prices information to a plurality of receiver stations (18 of Fig. 1). Fig. 2 clearly illustrated that each receiver station includes a computer (22, 26, 28, 30, 34 and 38) and an output device (36). As disclosed in col. 8, line 14 to col. 9,

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line, the computer (22, 26, 28, 30, 34 and 38) computes (e.g. perform calculation to determined the Nth high and low prices or adding, see operation 192) receiver specific value (e.g., the determined Nth high and low prices) by processing information (e.g., the data stored in the register) in the stored in the computer, computes (e.g., perform calculations based on pre-programmed technical analysis of market action, such as buy-sell levels, unusual volume-price activity, etc) a receiver specific signal (e.g., the signal for activating flashing light 85) based on said receiver specific value (col. 8, line 70 to col. 9, line 4 clearly disclosed that operation 192 is followed by operation 194), and communicates an indication based on the receiver specific signal (based on the calculations performed in operation 194, a signal is outputted to flashing lights 85 for indicating market activity) . The discussion at col. 3, line 66 to col. 4, line 52 indicates that the receiver station (Fig. 2) receives the prices information for processing (e.g, performing computations as explained above) only when the stock symbol is matched with the stored stock symbol. Therefore, the stock symbol can be considered as “effective to control the computer (Figs. 4-6) to perform computations”(e.g., performing calculations as specified in operations 192 and 194), and can be considered as “control signal”.

Epstein differs from claim 6 of the present invention in that Epstein does not specifically disclose communicating a unit of programming to an output device in response to the specific signal. However, as taught by Linstroth et al. or Toy, communicating (e.g., 76 and 54 of Linstroth et al. or 283 of Toy) unit of programming (e.g., the voice message) to an output device when the price of stock is below or above a given threshold level is well known in the art. As Epstein, Linstroth and Toy all discloses a system for monitoring stock quotations, it would have been obvious to an artisan of ordinary skill at the time of the invention to apply the teaching of

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Linstroth et al. or Toy to the system of Epstein in order to not only allow the receiver station of Epstein to provide a visual indication but to provide an additional advantage of allowing the receiver station of Epstein to provide an audio message for reporting the stock performance to the users.

Regarding claim 6, the data source 10 (“origination transmitter station”) transmits the stock symbol (“first control signal”) to an “intermediate transmitter”. In order for the data source (10, 12) to transmit stock symbol and price information to the intermediate transmitter station (14, 16), the transmission must be initiated or caused by an activation or initiation signal (or any signal which cause the source 10 or 12 to transmit stock symbol and price information to station (14, 16)). Such signal can be considered as “a second control signal”.

Regarding claim 22, as disclosed in col. 9 of Epstein, the system transmits a plurality of stock information (“two or more programming”).

15. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epstein (U.S. Patent No. 3,387,268) in view of Linstroth et al (U.S. Patent No. 4,942,616) or Toy (U.S. Patent No. 4,554,418), further in view of Fletcher et al. (U.S. Patent No. 4,054,911).

The combination of Epstein and Linstroth et al. or Toy differs from claims 33 and 34 in that it does not disclose downloading of operating instructions. However, as taught by Fletcher et al. (col. 49), downloading operating instructions to a receiver station for performing stock analysis is extremely well known in the art. Since Epstein in col. 9, lines 1-9 clearly indicates that the operations are carried out by arithmetic techniques, it would have been obvious to an artisan of ordinary skill at the time of the invention to download well known stock analysis

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software or operating instructions as taught by Fletcher et al. to the receiver station of Epstein in order to allow the receiver station to implement different calculations or functions without any modification to the costly hardware.

16. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foss (U.S. Patent No. 1,927,702) in view of Fletcher et al (U.S. Patent No. 4,054,911).

Foss disclosed an average price computer system for computing and displaying the average price of a group of representative stocks (col. 1, lines 1-5), said the system includes a transmitter (“transmitter station”) for transmitting signals to control the operation of an average price computer (“a computer”) and a quotation board (“an output device”) for displaying average prices or quotations (col. 1, lines 1-5). As disclosed in col. 25, lines 106-112 and col. 24, lines 114-116, the signals from the transmitter controls the operation of the computer in averaging the stock prices. Therefore, claimed “control signal” is met by the signals from the transmitter station for controlling the average computer. The discussion in col. 25, lines 11-55 indicates that the computer computes a receiver specific value (e.g., the difference value) by processing information (e.g., the stored price and previous price) stored in said computer, computes (e.g., adding the difference divided by a predetermined factor or subtracting the difference divided by the factor) a specific signal (e.g., the signal representing the computed result) based on the specific value, and communicates a unit of programming (e.g., displaying the computed prices on the board) based on the receiver specific signal.

Although Foss does not specifically disclose that the signals (“control signal”) is stored in the transmitter, Fletcher et al. in col. 5, lines 46-52 clearly disclose that the control signals can be

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stored in the data base of the transmitter station. Since Fletcher et al. in col. 49 clearly suggests that the control signals can be used for effecting stock performance analysis, it would have been obvious to an artisan of ordinary skill at the time of the invention to stored the control signals at the transmitter station of Foss as taught by Fletcher et al. in order in allow transmitter to transmit the signals to the receiver station at any convenient time.

Regarding claim 7, providing an intermediate transmitter for relaying or amplifying signals is notoriously old and extremely well known in the art (e.g., satellite or repeater). Therefore, it would have been obvious to provide the system of Foss with such well known relay or amplifying station in order to transmit the signals to more locations or areas or to amplify the signals.

17. Claims 25-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over “TELESOFTWARE-VALUE ADDED TELETEXT” by J. Hedger et al. (Hereinafter “Hedger”) in view of Cox et al. (U.S. Patent No. 4,388,645).

Regarding claims 25 and 30, Hedger disclosed a system having a receiver station for receiving telesoftware from a transmitter station comprising a teletext receiver, a microcomputer and a television receiver (see page 556). As disclosed in col. 2, lines 5-20 of page 564, the downloaded software includes program (“first control signal”) for performing stock portfolio analysis. The discussion in col. 2, lines 5-20 of page 564 further indicates that the microcomputer uses the program to compute the rise or fall in the value (“generate a receiver specific value”) of the portfolio. The claimed “specific signal” is met by signal representing the receiver specific value. Based on the computed value, the computer displays information or

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messages (“a unit of programming”) for indicating the performance of his or her stock portfolio (e.g., the messages for tell a person all the share prices in a particular group which have gone up by more than 10 pence since yesterday’s closing figures’).

Hedger differs from claims 25 and 30 in that Hedger does not show an intermediate transmitter station. However, as evidenced by Figs. 1 and 4 of Cox et al., providing an intermediate transmitter station for receiving, storing and rebroadcasting the teletext programming is known prior to the filing date of the instant application. Cox et al. in Fig. 4 clearly illustrated that the received programming can be selectively stored in according to the memory addresses and selectively transmitted in according to the received time codes (“second control signals”). Since the program (“first control signal”) of Hedger is transmitted in the vertical blanking interval of television signals and since the intermediate transmitter station of Cox et al. is used for relaying or rebroadcasting the programming embedding in the vertical blanking interval (e.g., teletext) of television signals, it would have been obvious to an artisan of ordinary skill at the time of the invention to provide the system of Hedger with the intermediate transmitter station as taught by Cox et al. in order to allow the system of Hedger to relay or broadcast the programming or software to more locations or areas and to allow the programming or software to be rebroadcasted at any desirable time without any intervention from intermediate station operators.

Regarding claims 26 and 27, the combination of Hedger and Cox et al. discloses that the telesoftware received at the intermediate station can be received before (e.g., storing the telesoftware in memories (38a-38c) and then in response to the time codes (Fig. 3 of Cox et al.) at later time to retransmit the stored telesoftware) or after (e.g., storing the telesoftware in

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memories (38a-38c) after the time codes specified in row 24 of Fig. 2 of Cox et al. are received) the one or more second control signals.

Regarding claim 28, the combination of Hedger and Cox et al. shows one or more storage devices (38a-38c).

Regarding claims 29 and 32, the time of the transmitting step is controlled by the time codes (Figs. 2 and 3 of Cox et al.).

Regarding claim 31, the intermediate station of Cox et al. includes a microprocessor (col. 8, lines 11-12). Therefore, the combination of Hedger and Cox et al. includes a computer for comparing the time codes ("second control signals") to select the telesoftware ("first control signals") stored in memories 38a-38c.

18. Claims 25-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. (U.S. Patent No. 4,054,911) in view of Linstroth et al. (U.S. Patent No. 4,942,616) or Toy (U.S. Patent NO. 4,554,418), further in view of Cox et al. (4,388,645).

Regarding claims 25 and 30, Fletcher et al. disclosed a method of delivering control instructions to a receiver station which comprises a microprocessor 310 ("computer"), and CRT 330 or a printer 316 ("an output device"). As disclosed in col. 49, lines 28-55, the received control instructions include control program ("first control signals") for performing stock analysis. Based on the downloaded control program, the microprocessor 310 ("computer") compares the real time incoming last stock price with the "buy" or "sell" limits stored in the microprocessor 310 ("processing information stored in said computer"). If a specific value generated ("to generate a receiver specific value") from the comparison exceeds the preselected

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limit set by the user, a signal is generated (“generate a receiver specific signal”) to provide alert on the screen. Although Fletcher et al. does not specifically disclose communicating a unit of programming based on a receiver specific signal, Linstroth et al. or Toy clearly teaches such. Linstroth et al. or Toy, same as Fletcher et al. disclose a system for monitoring stock performance. As disclosed by Linstroth et al. Or Toy, when the real-time last sale price of a given stock exceeds a specified trigger price, a signal is generated (“generate a specific signal”) for activating a voice or speech synthesis unit (74 of Linstroth et al. or 283 of Toy) to communicate voice messages (“communicating a unit of programming”) to an output device (e.g., speaker). As all Fletcher et al., Linstroth et al. and Toy discloses a method for monitoring stock prices, it would have been obvious to an artisan of ordinary skill at the time of the invention to provide the station of Fletcher et al. with the voice synthesis unit as taught by Linstroth et al. or Toy in order to not only allow the receiver station of Fletcher et al. to provide a visual indication but to provide an additional advantage of allowing the receiver station of Fletcher et al. to provide an audio message for reporting the stock performance to the users.

The combination of Fletcher et al. and Linstroth et al. or Toy further differs from claims 25 and 30 in that it does not show an intermediate transmitter station. However, as evidenced by Figs. 1 and 4 of Cox et al., providing an intermediate transmitter station for receiving, storing and rebroadcasting the programming is known prior to the filing date of the instant application. Cox et al. in Fig. 4 clearly illustrated that the received programming can be selectively stored and transmitted in according to the received time codes (“second control signals”). Fletcher et al. in col. 6, lines 60-65 clearly indicates that the control instructions can be transmitted via CATV system using television distribution equipment. Since the system of Cox et al. is a television

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distribution system, it would have been obvious to an artisan of ordinary skill at the time of the invention to use the television distribution system of Cox et al. to convey the control instructions of Fletcher et al. in order to relay or broadcast the control instructions to more remote locations or areas and to allow the control instructions to be rebroadcasted at any desirable time.

Regarding claims 26 and 27, the combination discloses that the control instruction or program received at the intermediate station can be received before (e.g., storing the program in memories (38a-38c) and then in response to the time codes (Fig. 3 of Cox et al.) at later time to retransmit the stored program) or after (e.g., storing the program in memories (38a-38c) after the time codes specified in row 24 of Fig. 2 of Cox et al. are received) the one or more second control signals.

Regarding claim 28, the combination shows one or more storage devices (38a-38c of Cox et al.).

Regarding claims 29 and 32, the time of the transmitting step is controlled by the time codes (Figs. 2 and 3 of Cox et al.).

Regarding claim 31, the intermediate station of Cox et al. includes a microprocessor (col. 8, lines 11-12). Therefore, the combination includes a computer for comparing the time codes ("second control signals") to select the control program ("first control signals") stored in memories 38a-38c.

19. Applicant's arguments with respect to claims 3-34 have been considered but are moot in view of the new ground(s) of rejection.

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20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Faile whose telephone number is (703) 305-4380.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.


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